

Serial No. 09/512,576

- 6 -

Art Unit: 2142

REMARKS

This Amendment is responsive to the Office Action dated January 17, 2003. All rejections and objections are respectfully traversed. Reconsideration is respectfully requested.

At paragraphs 2-11 of the Office Action, the Examiner rejected claims 1-11 as being obvious under 35 U.S.C. 103, citing United States patent number 5,805,803 of Laursen et al. ("Laursen et al.") in view of United States patent number 5,917,823 of Benning et al. ("Benning et al."). Applicant respectfully traverses this rejection.

Laursen et al. disclose a system allowing applications to be split such that client devices primarily perform presentation functions, while backend services are used for accessing data using messaging across an abstracted interface. The architecture described by Laursen et al. stores data on the server, and the client device provides an interface to the data.

A connection service in the Laursen et al. system maintains a connection database to keep track of currently active circuits on the server, including their physical and logical addresses. When a client connects to the server in the Laursen et al. system, the client sends a message to a connection service by way of an upstream manager. The connection service establishes a downstream manager for the requested circuit, and updates the connection database. The connection service of Laursen et al. manages allocation and deallocation of *asymmetric virtual circuits* through the media server.

Laursen et al. describe establishing by a client device sending a request for service to an upstream manager. The upstream manager of Laursen et al. accesses the connection service to obtain a binding between the incoming request for service and a downstream manager for routing a response message or data stream back to the client originating the request for service. The

Serial No. 09/512,576

- 7 -

Art Unit: 2142

connection service of Laursen et al. accesses a connection service table to obtain information regarding a relationship between the upstream physical address, the client logical address, a corresponding downstream physical address, and a corresponding downstream logical address. Once the upstream manager obtains a downstream manager binding from the connection service, the upstream manager modifies the service request message received from the client to insert downstream manager binding information into the message. The service request message is then routed by upstream manager to the requested media service. Response messages or data stream activations are sent by the media service directly to the downstream manager identified by the binding information inserted into the service request message by the upstream manager. In this manner, the media service disclosed in Laursen et al. is able to route information back to the client through the previously bound downstream manager. Benning et al. disclose a packet switching network supporting X-series protocol access that employs Permanent Virtual Connection (PVC) trunks as backbone trunks.

Nowhere in the combination of Laursen et al. and Benning et al. is there disclosed or suggested any system or method for binding a connection-oriented client to a communication channel that includes creating a communication channel for the connection-oriented client, where the communication channel has a channel identifier, creating a single virtual circuit for the connection-oriented client on the communication channel, where the virtual circuit is the *only virtual circuit on the communication channel, binding the communication channel to the connection-oriented client based upon the channel identifier, and forwarding data received from the communication channel to the connection-oriented client based upon the channel identifier*, as in the present independent claims 1, 6, 8, 10 and 11.

Serial No. 09/512,576

- 8 -

Art Unit: 2142

In contrast, the structure of the connection service table of Laursen et al. includes upstream manager physical address, client logical address, downstream manager physical address, downstream manager logical address, and downstream client physical address. As expressly stated in Laursen et al.:

Because the present invention is best used in an *asymmetric network*, the channel used by the client for transmitting service requests and information is not the same channel used by the client for receiving information from the server. *The connection service table is used to maintain information pertaining to the binding between the upstream channel and the downstream channel.* (emphasis added)

Thus each virtual connection in Laursen et al. operates over *two channels* – one upstream and one downstream. The upstream manager physical address in Laursen et al. is a port specific upstream physical address from which the upstream manager receives data from a client. The client logical address of Laursen et al. is used to identify a client running on client device that originates service requests for the server, and that consumes response messages and data streams received from media server. The downstream manager physical address in Laursen et al. is a port-specific downstream physical address from which the downstream manager sends data on line to a client device. The downstream manager logical address described in Laursen et al. uniquely identifies a downstream manager instance which is used for managing the channel identified by downstream manager physical address. The downstream client physical address in Laursen et al. identifies the port-specific downstream address at which a client receives data from server. None of these addresses described in Laursen et al. enable the binding of the present independent claims between a communication channel and a connection oriented client. Instead, the client virtual address appears to be used to identify messages received for the client. As to

Serial No. 09/512,576

- 9 -

Art Unit: 2142

Benning et al., it add nothing further in this regard, since it is focused on transferring X.25 packets, and routing X.25 packets, by establishing permanent virtual connections between pairs of packet engines using frame relay protocol. The permanent virtual circuits of Benning et al. act as trunks, over which encapsulated X.25 packets are sent, which are then decapsulated upon receipt independent of client destination determination. Thus the combination of Laurson et al. and Benning et al. includes no hint or suggestion of any binding between a communication channel and a connection oriented client, *where the communication channel has one virtual circuit for the connection oriented client, and where received data is forwarded from the communication channel to the connection oriented client based on the channel identifier, as in the present independent claims.*

For the above reasons, Applicant respectfully urges that the combination of Laurson et al. and Benning et al. fails to disclose or suggest all the features of the present independent claims 1, 6, 8, 10 and 11. Accordingly, the combination of Laurson et al. and Benning et al. does not support a *prima facie* case of obviousness under 35 U.S.C. 103 with regard to the present independent claims 1, 6, 8, 10 and 11. As to the remaining claims, they each depend from claims 1, 6, 8, 10 and 11, and are believed to be patentable over the combination of Laurson et al. and Benning et al. for at least the same reasons. Reconsideration is respectfully requested.

The Examiner also rejected claims 12-13 in the Office Action. Claims 12-13 have been canceled herein without prejudice or dedication.

Applicants have made a diligent effort to place the claims in condition for allowance. However, should there remain unresolved issues that require adverse action, it is respectfully requested that the Examiner telephone the undersigned Applicants' Attorney at 978-264-6664 so that such issues may be resolved as expeditiously as possible.

Serial No. 09/512,576

- 10 -

Art Unit: 2142

For these reasons, and in view of the above amendments, this application is now considered to be in condition for allowance and such action is earnestly solicited.

Respectfully Submitted,

October 28, 2003
Date

David A. Dagg
David A. Dagg, Reg. No. 37,809
Attorney/Agent for Applicant(s)
Steubing McGuinness & Manaras LLP
125 Nagog Park Drive
Acton, MA 01720
(978) 264-6664

Docket No. 2204/A12 120-234

RECEIVED
CENTRAL FAX CENTER

OCT 28 2003

OFFICIAL